

## HACK 207

22. A fertilizer composition according to claim 20, wherein the malt extract or spent grain liquor is a by-product of a brewing process.
23. A fertilizer composition according to claim 20, wherein the malt extract or spent grain liquor is a by-product of beer brewing.
24. A fertilizer composition according to claim 20, wherein the composition comprises both soluble and insoluble material.
25. A fertilizer composition according to claim 24, wherein the soluble material comprises one or more of simple sugars, free amino nitrogen, glucans, vitamins and calcines.
26. A fertilizer composition according to claim 25, wherein the free amino nitrogen is protein.
27. A fertilizer composition according to claim 24, wherein the insoluble material comprises proteins and/or carbohydrates.
28. A fertilizer composition according to claim 20, wherein the composition is either a liquid or a solid.
29. A fertilizer composition according to claim 27, wherein the solid is a dry powder.
30. A fertilizer composition according to claim 28, further comprising one or more bacteria and/or yeast.
31. A fertilizer according to claim 30, wherein the bacteria are a mixture of organisms selected from the group consisting of *Bacillus* spp, *Pseudomonas* spp, *Azotobacter* spp, *Nitrobacter* spp, *Azospirillum* spp, and *Derxia* spp.
32. A fertilizer composition according to claim 28, further comprising yeast extract and/or a yeast cell wall preparation.

## HACK 207

- A1
33. A method of improving plant growth, comprising the step of applying to said plant an effective amount of a fertilizer composition according to claim 20.
34. A method of improving soil condition, comprising the step of applying to said soil an effective amount of a fertilizer composition according to claim 20
35. A method of preventing or inhibiting fungal growth, comprising the step of applying to soil or plants an effective amount of a fertilizer composition according to claim 20.
36. A method according to any claim 34, wherein the composition is applied by spray or mechanical spreader.
37. A method of manufacturing a fertilizer composition according to claim 20 comprising the step of extracting spent grain liquor or malt extract from a brewing process.
38. A method according to claim 37, further comprising the step drying said composition.